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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Stephen C. Kaufman Intellectual Property Law Dept. IBM Corporation P.O. Box 218 Yorktown Heights, NY 10598			EXAMINER PHAM, MICHAEL	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/743,158

Applicant(s)

AMITAY, EINAT

Examiner

MICHAEL PHAM

Art Unit

2167

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-45, 56-63 and 65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-45, 56-63, and 65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Detailed Action

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/4/2010 has been entered.

Status of claims

2. Claims 37-45, 56-63, and 65 are pending.
3. Claims 37-45, 56-63, and 65 have been examined.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 65 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

New claim 65 contains subject matter that was not disclosed in the specification. Specifically there does not appear to be anything in regards to a complete document in the specification as described in affiant's affidavit.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 65 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. 6571239 by Cole et. al. (hereafter Cole).

Claim 65:

Cole discloses the following claimed limitations

“adding information from at least some of user queries to said complete document index to create an enhanced index of at least complete documents and some information from said user queries; and”[Figure 2 Accordingly, adding information (figure 2 element 245, keywords) from at least some of user queries (figure 2 element 245, query) to said complete document index (figure 2 element 255, index) to create an enhanced index of at least complete documents and some information from said user queries (Figure 2 element 205, index)]

“searching said enhanced index of complete documents with user queries upon receipt of an user inquiry.” [Figure 2. Accordingly, searching said enhanced index of complete documents with user queries (figure 2 element 205, match against index) upon receipt of an user inquiry (figure 2 element 201, query)]

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 37-45, and 56-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0091671 by Prokoph (hereafter Prokoph) further in view of U.S. Patent 6571239 by Cole et. al. (hereafter Cole) and U.S. Patent Application Publication 2003/0208482 by Kim et. al. (hereafter Kim).**

Claim 37:

Cole discloses the following claimed limitations:

“receiving user queries” [figure 2 element 201, query]

“searching an enhanced web index of documents with user queries, and wherein said enhanced web index containing document information and text, metadata” [figure 2 and col. 3 lines 18-19, the keywords in the keyword index (120) are associated with one or more objects in the repository. Accordingly, searching (figure 2 element 205, match) an enhanced web index of documents (figure 2 element 205, index) with user queries (figure 2 element 201, query), and wherein said enhanced web index (figure 2 element 205) containing document information (associated with objects) and text, metadata (keyword)]

“adding information from at least some of said user queries to said enhanced web index”
[Accordingly, adding information (figure 2 element 245, keyword) from at least some of said user queries (figure 2 element 245, query) to said enhanced web index (figure 2 element 225, index)]

Cole does not explicitly disclose web index including "anchor text".

On the other hand, Kim discloses 0029, indexer 26 extracts the anchor text from the anchor text and link database 24 parses the keywords from the web page database 14 and generates an indexed database. Accordingly, an web index (indexed database) including anchor text (anchor text).

Cole and Kim all are directed to indexing systems for searching for electronic documents. It would have been obvious to a person of an ordinary skill in the art to have applied Kim's

disclosure to the disclosure in Cole for the purpose of providing more relevant searches by providing more relevant indices. Kim 0014 discloses inbound links to a page help to assess the importance of the page. Because some of the inbound links originate from authors other than the one who wrote the page being considered, they tend to give a more objective measure of the quality or importance of the pages. By making a link to other page, the author of the originating link endorses the destination page. Therefore, including within the index the anchor text, would effectively result in a better search.

Claim 38 :

The combination of Cole and Kim disclose in Cole “wherein said adding comprises associating queries with documents retrieved by a search engine.”[Figure 1. col. 3 lines 8-9, the queries are passed to a receiver 105. Col. 3 lines 15-19, Under Alternative A, the receiver passes the query to a search Engine which matches the query against the (modified) keyword Index. The keywords in the keyword index are associated with one or more objects in the repository. Accordingly, wherein said adding comprises associating queries (queries/keywords) with documents (objects) retrieved by a search engine (search engine)]

Claim 39 :

The combination of Cole and Kim disclose in Cole “wherein said associating comprises determining which of said retrieved documents to associate with said queries and determining which queries to associate with said retrieved documents.”[Col. 1 lines 20-24, if the query matches one or more keywords in the index, the data objects associated with those keywords, or

a description of these objects, such as a hitlist of titles, thumbnails, etc. , are retrieved from the repository and returned to the search engine. Accordingly, wherein said associating comprises determining which of said retrieved documents (objects) to associate with said queries (queries/keywords) and determining which queries (queries/keywords) to associate with said retrieved documents (objects).]

Claim 40 :

The combination of Cole and Kim disclose in Cole “wherein said adding comprises listing a term in a query and the number of times that term is associated with a document.” [Col. 4 lines 63-67-Col. 5 lines 1-2, if the user enters a response which indicates satisfaction, the first query stored is parsed into keywords. Each keyword is associated with an object, and optionally, statistics of date usage are updated for each association. Under Alternative A, the Master Index is updated with theses associations directly. Col. 4 lines 18-20, how long to keep associations between keywords and data objects either in the master keyword index in alternative A or in the auxiliary index in alternative B. Accordingly, wherein said adding comprises listing a term in a query (master Index is updated with theses associations) and the number of times (how long to keep) that term (keyword) is associated with a document (associations between keywords and data objects)]

Claim 41 :

The combination of Cole and Kim disclose in Cole “wherein said adding comprises ranking queries associated to documents.” [Col. 4 lines 63-67-Col. 5 lines 1-2, if the user enters a

response which indicates satisfaction, the first query stored is parsed into keywords. Each keyword is associated with an object, and optionally, statistics of date usage are updated for each association. Under Alternative A, the Master Index is updated with theses associations directly. Col. 4 lines 18-20, how long to keep associations between keywords and data objects either in the master keyword index in alternative A or in the auxiliary index in alternative B. Accordingly, wherein said adding (index updated) comprises ranking queries associated to documents (sorts associations)]

Claim 42 :

The combination of Cole and Kim disclose in Cole “wherein said ranking comprises ranking said queries according to frequency of usage.”[Col. 4 lines 23-25, sorts associations from oldest to newest and from lowest to highest frequency. Accordingly, ranking comprises ranking said queries (sorts associations) according to frequency of usage (frequency of usage)]

Claim 43 :

The combination of Cole and Kim disclose in Cole “wherein said ranking comprises ranking said queries according to time of usage.” [Col. 4 lines 23-25, sorts associations from oldest to newest and from lowest to highest frequency. Accordingly, wherein said ranking comprises ranking said queries (sorts associations) according to time of usage (oldest to newest)]

Claim 44 :

The combination of Cole and Kim disclose in Cole “wherein said adding comprises updating said index with at least some of said ranked queries.” [Col. 4 lines 23-25, sorts associations from oldest to newest and from lowest to highest frequency. Col. 4 lines 44-45, associations are then added to either the master Index. Accordingly, wherein said adding comprises updating said index (associations are then added to either the master Index) with at least some of said ranked queries (sorts associations)]

Claim 45 :

The combination of Cole and Kim disclose in Cole “wherein said updating comprises filtering out lowly ranked queries.”[Col. 4 lines 50-51, if yes, the most deletable association is deleted to make room. Accordingly, wherein said updating comprises filtering out lowly ranked queries (the most deletable association is deleted)]

Claim 56 :

“receiving user queries” [figure 2 element 201, query]

“searching an enhanced web index of documents with user queries, and wherein said enhanced web index containing document information and text, metadata”[figure 2 and col. 3 lines 18-20, the keywords in the keyword index are associated with one or more objects in the repository (115). Accordingly, searching (figure 2 element 205, match) an enhanced web index of documents (figure 2 element 205, index) with user queries (figure 2 element 201, query), and wherein said enhanced web index (figure 2 element 205, index) containing document

information (associated with one or more objects in the repository 115) and text, metadata (keywords)]

“associating terms in said user queries with documents said terms used to retrieve; and”[col. 3 lines 40-43, query, match against keywords, and return of relevant data-continues until the user’s response indicates satisfaction with one or more objects retrieved. Accordingly associating terms (figure 2, keyword) in said user queries (figure 2, query) with documents (object) said terms used to retrieve (satisfaction with one or more objects retrieved)]

“adding said terms to an index with which said documents were retrieved”[Accordingly, adding said terms (figure 2 element 245, keyword) to an index (figure 2 element 255, index) with which said documents were retrieved (figure 2 element 240, satisfaction).]

Cole does not explicitly disclose wherein the web index includes "anchor text".

On the other hand, Kim discloses indexer 26 extracts the anchor text from the anchor text and link database 24 parses the keywords from the web page database 14 and generates an indexed database. Accordingly, an web index (indexed database) including anchor text (anchor text).

Prokoph, Cole, and Kim all are directed to indexing systems for searching for electronic documents. It would have been obvious to a person of an ordinary skill in the art to have applied Kim's disclosure to the combination of Prokoph and Cole for the purpose of providing more

relevant searches by providing more relevant indices. Kim 0014 discloses inbound links to a page help to assess the importance of the page. Because some of the inbound links originate from authors other than the one who wrote the page being considered, they tend to give a more objective measure of the quality or importance of the pages. By making a link to other page, the author of the originating link endorses the destination page.

Claim 57 :

The combination of Cole and Kim disclose in Cole “indicating how frequently said terms occurred in said documents and user queries” [Col. 4 lines 14-17, it often also keeps other statistics, such as the number of sessions associated with keywords, to indicate the frequency of use of the keyword. Col. 4 lines 21-25, the logic for deletion of keyword-object associations takes various forms. One embodiment shown in FIG. 2, sorts associations from oldest to newest and from lowest to highest frequency. Accordingly, indicating how frequently (frequency) said terms (keywords) occurred in said documents (keyword-object association) and user queries (sessions associated with keywords)]

Claim 58 :

The combination of Cole and Kim disclose in Cole “wherein said user queries comprise a portion of the queries used in a session to find a selected document” [Figure 2 and col. 4 lines 15-17, number of sessions associated with keywords, to indicate the frequency of use. Accordingly, wherein said user queries (query) comprise a portion of the queries used in a session (matched keywords) to find a selected document (object)]

Claim 59 :

The combination of Cole and Kim disclose in Cole “wherein said user queries comprise a first query of a session to find a selected document”[Figure 2 and col. 4 lines 15-17, number of sessions associated with keywords, to indicate the frequency of use. Accordingly, wherein said user queries (query/keyword) comprise a first query (first query) of a session (session) to find a selected document (object)]

Claim 60 :

The combination of Cole and Kim disclose in Cole “wherein a document associated with a query comprises the document selected by said user”[col. 3 lines 49-51, the end of a session can also be explicitly indicated by a user response, in which the user marks objects as relevant or irrelevant at the user interface. Accordingly, wherein a document (object) associated with a query (query) comprises the document selected by said user (user marks objects)]

Claim 61 :

The combination of Cole and Kim disclose in Cole “wherein a document associated with a query comprises the document browsed to by said user as a result of a query”[col. 3 lines 49-51, the end of a session can also be explicitly indicated by a user response, in which the user marks objects as relevant or irrelevant at the user interface. Accordingly, wherein a document (object) associated with a query (query) comprises the document browsed to by said user as a result of a query (user marks objects)]

Claim 62 :

The combination of Cole and Kim disclose in Cole “wherein documents associated with a query comprise the higher ranked documents produced from a query.”[col. 1 lines 42-47, list of objects is returned when the query contains that word or phrase. Many variations of this basic method have been developed, including ranking the returned objects by analytical or statistical properties that are intended to reflect the presumed relevance or importance of the object. Accordingly, wherein documents (objects) associated with a query (query) comprise the higher ranked documents (ranking the returned objects) produced from a query (query).]

9. Claims 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0091671 by Prokoph (hereafter Prokoph) and U.S. Patent 6571239 by Cole et. al. (hereafter Cole), U.S. Patent Application Publication 2003/0208482 by Kim et. al. (hereafter Kim) further in view of U.S. Patent Application Publication 2004/0261021 by Mittal et. al. (hereafter Mittal).

Claim 63 :

The combination of Cole and Kim do not explicitly disclose “wherein said user queries are in a language other than the language of a selected document”

On the other hand, Mittal discloses, abstract, queries can be expressed using character sets and/or languages that are different from the character set and/or language of at least some of the data that is to be searched. Accordingly, wherein said user queries (queries) are in a

language (using language) other than the language of a selected document (languages that are different from the language of at least some of the data that is searched) is disclosed.

Cole, Kim and Mittal are all directed towards document search and therefore all are within the same field of endeavor as applicant's invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Mittal's disclosure above to the combination of Prokoph and Cole for the purpose of allowing various devices to utilize the benefits of the search indices. Devices such as mobile phones would be too tedious for query entry, and further typing in different languages using an ASCII keyboard also would be tedious and slow see 0006 and 0018 of Mittal. Accordingly, by allowing different languages to be entered in as queries, it allows for an improvement in the over all search process.

Response to Arguments

10. Applicant's arguments with respect to claim 37-45, 56-63, and 65 has been considered but are moot in view of the new ground(s) of rejection.

Applicant's assert the following with regard to the cited references.

A. Affidavit

The affidavit under 37 CFR 1.132 filed 2/10/2010 is insufficient to overcome the rejection of claims 37-45, 56-63, and 65 based upon the cited references as set forth in the Office action because: The explanations are unpersuasive over the cited prior art. Affiant asserts the following:

i. In regards to Prokoph, Affiant asserts pages 1-5 of the affidavit that the invention's goal and Prokoph's goal are different. That Prokoph aims to reduce the size of the index while the invention is to find relevant documents, while the invention is to increase the likelihood of finding relevant documents. Affiant further asserts that the invention searches complete documents on the internet via queries; and that Prokoph searches document extracts. That Prokoph does not disclose searching an enhanced index of documents nor does he add information fro the user queries to the enhanced index.

In response, this is moot.

ii. In regards to Cole, Affiant asserts That the system of Cole deals with keyword indexes and not with an index of complete documents. That Cole is not adding information from the queries to the Repository. Instead Cole adds to the keyword index. Hence Cole does not disclose adding information from at least some of the user queries to the index of complete documents or to the enhanced web index.

In regards to Cole, the affidavit refers only to the system described in the above referenced application and not to the individual claims of the application. As such the declaration does not show that the objective evidence of nonobviousness is commensurate in scope with the claims. Regarding the claimed limitation, the limitation states "adding information from at least some of said user queries to said enhanced web index." Cole discloses

this as seen in the rejection above. Adding information from at least some of the user queries to the index of complete documents / to the enhanced web index is therefore disclosed.

B. Remarks page 7, A web index refers to an index with complete document information and text, including anchor text and metadata. That it certainly does not refer to an index of abstracts of documents or to an index containing only keywords.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The web index as illustrated above is disclosed by the combination of the cited references.

C. Page 7 Prokoph is creating a new type of index to search which includes just abstracts of the documents, whereas Applicant is searching an index of complete documents.

This is moot.

D. Prokoph does not disclose adding information from at least some of said user queries to said complete document index and searching said enhanced index of complete documents with user queries upon receipt of a user query is not disclosed.

This is moot.

F. Applicant's state that they expand the index whereas Prokoph reduces it.

This is moot.

G. That Cole does not work with an index of complete documents or a web index.

Cole works with just a keyword index which does not have the complete document information.

In response this is disagreed. Cole works with an index of complete documents. Complete documents are found in repository 115. Cole works with a web index as seen in figure 2, an index 120.

H. That Cole does not disclose "adding information from at least some of said user queries to said enhanced web index." That Cole is working with a keyword index as opposed to an index of complete documents.

In response this is disagreed. Cole discloses a search system in figure 2. Accordingly disclosing adding information (figure 2 element 245, keywords) from at least some of said user queries (figure 2 element 245, query) to said enhanced web index (figure 2 element 225, index).

I. That nowhere does Cole mention that an index of complete documents is updated or modified based on the queries. That this is because no document index being updated is disclosed.

In response, this is disagreed see figure 2 where the index is updated.

J. That there is no motivation to combine the 3 references. That there is improper hindsight.

In response, this is moot.

J. In summary, applicant's asserted the following:

i. Prokoph does not mention updating any document index let alone an index of complete documents based on words used in a query.

In response, this is now moot.

ii. Cole discusses updating only keyword indexes.

In regards to Cole, please see above.

iii. That there is no motivation to combine.

In regards to motivation to combine, this is moot. Please see above rejection for motivation.

Conclusion

11. The prior art made of record listed on PTO-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Pham whose telephone number is (571)272-3924. The examiner can normally be reached on Monday - Friday 9am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/M. P./

Examiner, Art Unit 2167

/John R. Cottingham/

Supervisory Patent Examiner, Art Unit
2167

